

Micro culture methods in LOINC – Pam Banning

We're tackling getting improved automated searches for cultures to LOINC. Client catalogs come to us for mapping, with a variety of row counts for their different cultures, and we try to get an automated match prior to matching each client code by hand. The LOINC method fields in micro cultures can be "wordy". Client files have not contained much in the way of displays to lead the tool to such specific methods. Thus some idiosyncracies have to be inserted into a groomed file before successful automated matching can be made (takes time and memory to get them entered correctly). I'd be interested in learning from the committee if there would be conceived loss of description specificity in these areas if we reduce the verbage in the method field. I'm sharing this with a few individuals on the committee in advance, to get their opinions as well.

We at 3M wondered if a few scenarios could be addressed:

1. The replication of the source in the method field, when it's also in the specimen field:

17928-3 MICROORGANISM IDENTIFIED:PRID:PT:BLD:NOM:BLOOD
AEROBIC CULTURE::MICRO

17934-1 MICROORGANISM IDENTIFIED:PRID:PT:BLD:NOM:BLOOD
ANAEROBIC CULTURE::MICRO

and

17950-7 MICROORGANISM IDENTIFIED:PRID:PT:FLU:NOM:STERILE BODY
FLUID AEROBIC CULTURE::MICRO

17956-4 MICROORGANISM IDENTIFIED:PRID:PT:FLU:NOM:STERILE BODY
FLUID ANAEROBIC CULTURE::MICRO

in each instance above, Blood or body fluid is in the System field.

Could the method field be amended to just state AEROBIC CULTURE or ANAEROBIC CULTURE? Urine cultures, intravascular line and environmental water cultures are other examples, although we would prefer the method just be CULTURE in those instances.

JTC: I fully agree with this proposal. The methods here are too specific and are redundant with specimen.

2. Where we have separate Aerobic and Anaerobic methods, could we get a "methodless" CULTURE to choose from? For example with Tissues, we have Aerobic, Anaerobic or Biopsy Culture as methods. Could we have a Culture method? Currently, there's only 2 codes in the LOINC database that just say CULTURE for method.

JTC: A use case would help, but I would agree with this based on the need to post-process terms from outside labs where the method is not described beyond culture.

3. Can the word ROUTINE BACTERIAL be removed from the following three codes:

6460-0 MICROORGANISM IDENTIFIED:PRID:PT:SPT:NOM:ROUTINE
BACTERIAL CULTURE::MICRO

6462-6 MICROORGANISM IDENTIFIED:PRID:PT:WND:NOM:ROUTINE
BACTERIAL CULTURE::MICRO

6463-4 MICROORGANISM IDENTIFIED:PRID:PT:XXX:NOM:ROUTINE
BACTERIAL CULTURE::MICRO

JTC: I completely agree. Priority or other perceived attributes (such as "rapid test:") should not be part of the LOINC term. These old terms should be deprecated if they are only differentiated by these ancillary concepts like "routine".

Our reasoning is that non-bacterial workups are covered under FUNGUS IDENTIFIED, ACID FAST BACILLUS IDENTIFIED, AMOEBA IDENTIFIED, and VIRUS IDENTIFIED analytes. We even have BACTERIA IDENTIFIED as an analyte.

4. The replication of the analyte in the method field:

574-4 FUNGUS IDENTIFIED:PRID:PT:PRT:NOM:ROUTINE FUNGAL
CULTURE::MICRO

There are just over 20 LOINC codes that have Fungus in both the analyte and the method fields.

JTC: Agree, unnecessary duplication.

McDonald – other comments

1. Use Fld. Sterile when referring to general class of fluids such as peritoneal, pleural, etc. that are sterile in healthy state [avoid needing that in method]
2. ? change Fld to BFld to be more specific that this is defined as body fluid.
3. ? Is it necessary to say organism specific culture when the bacterial implies that – so more could be just cultures
4. Few terms should be ORD instead of NOM